



SUMMIT M Vipa

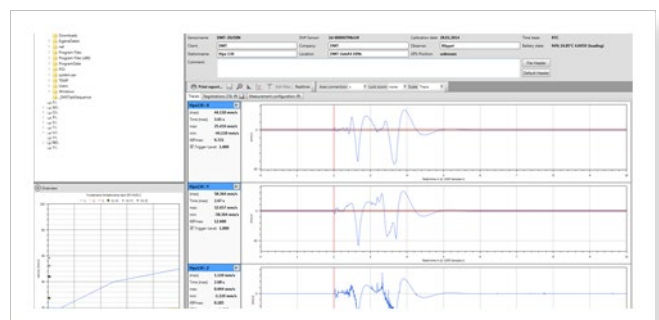
The vibration monitoring system for blast monitoring, infrastructure, engineering and micro-seismic applications

SUMMIT M Vipa is a three channel seismograph for vibration monitoring with an additional auxiliary channel e.g. to connect a microphone for air blast measurements. Powered by an internal Li-Ion battery, the VIPA is the ideal system for autonomous mobile measurements. Being fully remote controllable with automatic data transfer functionality, the individual units can be linked together easily via a local Ethernet network or over the Internet using the integrated radio modem to build up larger monitoring networks. High resolution 24 bit digitizing technology ensures high dynamic range and ultrasensitive vibration monitoring for continuous and event based recording.

Mobile Vibration Monitoring!

- Easy to use, lightweight, ruggedized
- 24 bit technology
- 4 GB internal data storage, virtually unlimited external storage via USB port
- Internal GPS for time sync
- Internal modem and Ethernet for easy remote access and network setup
- Internal Li-Ion battery

Windows-based report software



Technical Specifications	
Channels	3 channels (X-, Y-, Z- vibration) 1 aux-channel (acoustic)
Sample Interval	1 kHz, 2 kHz, 5 kHz, 10 kHz
Frequency Range	DC - 5 kHz
Recording Mode	Continuous or event based
Trigger Mode	Amplitude threshold for each channel, trigger also on KB and vector sum
Record Length	1 sec to 60 sec per file
Pre-trigger Length	0 sec to record length-1
A/D Converter	24 bit
1. Signal Input Range	$\pm 5 \text{ V}$ (10 V_{pp}) differential input
Measurement Range	175 mm/s with standard sensor DMT-3D/DIN, larger ranges on request
Time Synchronisation	Internal GPS module (ext. Antenna), absolute time accuracy : $< 10 \mu\text{s}$
Data Storage	Internal 4GB or external USB-mass-storage device
Instantaneous Dynamic Range	$\geq 113 \text{ dB}$ @ 1000 Hz sample rate
Crosstalk Rejection	$\geq 110 \text{ dB}$ (between all channels)
Total Harmonic Distortion	$\leq -100 \text{ dB}$
Common Mode Rejection	$\geq 105 \text{ dB}$
Gain Accuracy	$< 1 \%$ between channels
Data Communication	100base-TX Ethernet, internal HSPA/EDGE/GSM modem
Internal Battery	Li-Ion, typical life time >40 hours
External Power Supply	9-18 V DC, max 15 W during battery charge
Display	Colour graphical LCD with 320 x 240 resolution
Dimensions	30 x 25 x 12 cm
Weight	3.6 kg

DMT GmbH & Co. KG
Am TÜV 1
45307 Essen, Germany
Tel +49 201 172-1441
Fax +49 201 172-1693
www.dmt-group.com
info.summit@dmt-group.com



Disposal information:
Our products are subject to the WEEE directive. DMT has committed itself to take back all electrical and electronic components sold and to dispose of them professionally.
Please contact: products@dmt-group.com

WEEE Registration Number: DE 25917380

TÜV NORD GROUP

Environmental Specifications	
Operation Temperature	-20°C to + 70°C
Humidity Range	0 – 95 %
Protection Class	IP 67
Case	Solid waterproof housing deployable in any surface environment

Connectors	
USB	External storage on memory stick or hard disk drive
Ethernet-LAN	Router, switches, PC
Mobile Antenna	External mobile GSM antenna
GPS Antenna	External GPS antenna for precise time stamp
Vibration Sensor	- External geophone vibration sensor - 3D sensor or splitted sensors, borehole sensors - 12 V DC power supply provided for active sensors
AUX Channel	Additional recording channel, e.g. for microphone - 12 V DC power supply - Switchable phantom power (24 V / 48 V) for microphones
Digital IO	Multipurpose IO for accessories (alarm devices, trigger devices,..)
Serial IO	External RS232 for external printer
Power	External 9-18 V DC power supply

Specifications may be subject to technical changes

Available Extension / Accessories	
Seismology Extension	Increased sensitivity and dynamic range of up to 122 dB, additional sample rates: 125 Hz, 250 Hz, 500 Hz, optional SeedLink server
Printer	External serial protocol printer
Alarm Switch	External relays to switch external alarm devices, can be operated either via digital I/O interface of VIPA or remotely via mobile network (requires SIM-card)
Intelligent Sensor Supply	External sensor supply for connecting third party ICP-type sensors